



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division (7511P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

70644-5

Date of Issuance:

6/01/2016

NOTICE OF PESTICIDE:

☒ Registration
☐ Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Varnimo® ST

Name and Address of Registrant (include ZIP Code):

LidoChem, Inc.
20 Village Court
Hazlet, NJ 07730

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA or the Act).

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency (EPA). In order to protect health and the environment, the Administrator, on his or her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under the Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration or registration review of your product when the EPA requires all registrants of similar products to submit such data.
2. Submit storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) data as these data requirements are not satisfied. A one-year study is required to satisfy these data requirements. You have 18 months from the date of this registration to provide these data to the EPA.

Signature of Approving Official:

ShaRon Carlisle, Associate Chief
Microbial Pesticides Branch
Biopesticides and Pollution Prevention Division (7511P)
Office of Pesticide Programs

Date:

6/01/2016

3. Make the following labeling change before you release this product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 70644-5."
4. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

- Basic CSF dated 04/15/2016

Any CSFs other than those listed above are superseded.

If you have any questions, please contact Mike Mendelsohn of my branch by phone at (703) 308-8715 or via email at mendelsohn.mike@epa.gov.

Sincerely,



ShaRon Carlisle, Associate Chief
Microbial Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)
Office of Pesticide Programs

Enclosure: Stamped Label

{Affixed Booklet – Front Panel}

Varnimo® ST

{ABN: Varnimo® Concentrate}

Active Ingredient:

<i>Bacillus amyloliquefaciens</i> strain PTA-4838*	73.4%
Other Ingredients	<u>26.6%</u>
Total	<u>100.0%</u>

*Contains a minimum of 5 x 10¹¹ Colony Forming Units (CFU)/gram.

Keep Out of Reach of Children

CAUTION/PRECACIÓN

Si usted no entiende la etiqueta, busque a alguien para que la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail).

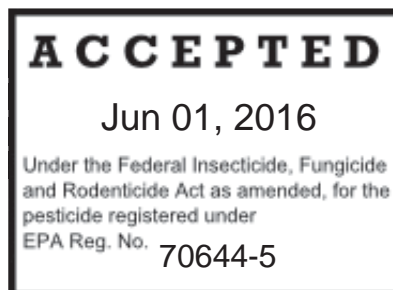
See inside for First Aid, additional *Precautionary Statements* and complete *Directions for Use*.

For Only Transportation Emergencies Call 24 Hours a Day 1-800-334-7577
For Product Use Information Call 1-732-888-8000 {or other appropriate number}
For Spill, Leak, Fire, Exposure or Accident, call Chemtrec at 1-800-424-9300

IMPORTANT: Read the entire label before using this product.

Net Weight: ____ pounds (____ kg)

Manufactured for and Guaranteed by:
LidoChem, Inc.
20 Village Court Hazlet, NJ 07730
[1-732-888-8000]



EPA Reg. No. 70644-L
EPA Est. _____
Made in the U.S.A.

[Batch Code {Batch code to be inserted}.]

{Affixed Booklet – Inside Panels}

First Aid

If Inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If on Skin or Clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Immediately rinse skin with plenty of water for 15-20 minutes. • Call a poison control center or doctor for further treatment advice.
Hotline Number: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Information Center at 1-800-858-7378 for general or medical information.	

[[Note: The First Aid statements' grid format will be used if market label space permits; otherwise a paragraph format will be used.]]

PRECAUTIONARY STATEMENTS

Hazards to Humans & Domestic Animals

CAUTION: Harmful if inhaled or absorbed through skin. Avoid breathing dust or spray mist. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing before reuse. Thoroughly wash with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Mixers/loaders and applicators must wear a NIOSH approved particulate respirator, with any R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. When mixing and loading, wear a chemical-resistant apron. When cleaning equipment, wear a chemical resistant apron.

See *Engineering Controls* for additional requirements.

User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

Engineering Controls

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

Immediately remove clothing/PPE if pesticide gets inside. Then thoroughly wash and put on clean clothing. Immediately remove PPE after handling this product. Wash the outside of gloves before removing. As soon as possible, thoroughly wash and change into clean clothing.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

[READ ENTIRE LABEL.

USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS]

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or Tribe, consult the state or tribal agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), restricted-entry interval and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

Exception: If the product is soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: coveralls, waterproof gloves and shoes plus socks.

Restrictions

Varnimo® ST [This Product] must be used only in accordance with recommendations on this label utilizing commercial liquid, slurry or mist type seed treatment equipment to secure proper application. Always thoroughly mix product before use. Do not mix Varnimo® ST [this product] in hopper-boxes or planter-boxes at planting time.

[As stated by regulations specified in 40 CFR 153.155, all seed treated with Varnimo® ST [this product] must be colored with an EPA-approved dye or colorant to visually distinguish as seed treated with a pesticide. It is mandatory that such dye or colorant be added into the slurry mixture containing Varnimo® ST [this product], prior to application through commercial seed treatment equipment. This regulation is necessary to prevent treated seed from accidental use as a food for man or feed for animals.]

Seed Quality and Storage of Treated Seed

Seed treatments applied to low vigor, poor quality or mechanically damaged seed may result in loss of seed germination or reduced seedling vigor. Prior to treatment of an entire seed lot, verify seed viability by treating a small portion of seed with the desired slurry mixture (Varnimo® ST [this product] alone or in combination with other commercial seed treatment products). Utilize standard seed germination methodologies to determine and verify seed viability. Proper storage conditions of treated seed are recommended. Due to seed quality and storage conditions beyond the control of LidoChem, Inc. {or appropriate company name}, no claims are made to guarantee the germination of carry-over treated seed.

Label Requirements of Treated Seeds

The Federal Seed Act requires that bags containing treated seed be labeled or tagged with the following information:

- This seed has been treated with *Bacillus amyloliquefaciens* strain PTA-4838.
- Do not use for feed, food or oil processing.
- Store away from feeds and other foodstuffs.
- Wear long sleeved shirt, long pants and waterproof gloves when handling treated seed.

Product Information

Varnimo® ST [This product] is a biological seed treatment that provides early season protection against listed plant parasitic nematodes. Varnimo® ST [This product] also helps establish a vigorous root system which results in greater yields, more uniform foliage and overall enhanced plant health.

Application Directions

Accurate application of Varnimo® ST [this product] to seed is required for best performance. Apply as a water-based suspension of adequate volume to distribute product uniformly over seed surface area. The volume of suspension will vary according to seed type and whether companion seed treatments are used.

Thoroughly pre-mix Varnimo® ST [this product] with water to ensure a uniform suspension. Mix the necessary amount of Varnimo® ST [this product] with a portion of the desired final volume of water. When the suspension is thoroughly mixed, add other seed protection products and then the remaining water to achieve desired slurry volume. For best results, immediately agitate final suspension before application to ensure complete and even distribution of product.

To verify compatibility with other seed treatment products, pre-test tank mixtures to evaluate formulation and proper physical compatibility of products. When tank mixing this product, observe the most restrictive limitations and precautions listed on the tank mix partner labels.

Instructions for Nematode Control Applications

Crop	Pests	Rate
Fruiting Vegetables such as African eggplant, Bell pepper, Bush tomato, Cocona, Currant tomato, Eggplant, Garden huckleberry, Goji berry, Ground cherry, Martynia, Naranjilla, Nonbell pepper, Okra, Pea eggplant, Pepino, Roselle, Scarlet eggplant, Sunberry, Tomatillo, Tomato (Cultivar, Hybrid and Tree varieties)	Root Knot Nematode	0.01 to 0.03 oz per 100,000 seeds
Cucurbit Vegetables such as Chayote (fruit), Chinese wax gourd (Chinese preserving melon), Citron melon, Cucumber, Gherkin, Gourd (edible types such as Hyotan, Cucuzza, Hechima and Chinese okra), <i>Momordica</i> spp (such as Balsam apple, Balsam pear, Bitter melon and Chinese cucumber), Muskmelon (such as cantaloupe), Pumpkin, Summer and Winter squash (including Butternut, Calabaza, Hubbard, Acorn and Spaghetti) and Watermelon	Root Knot Nematode	0.01 to 0.04 oz per 100 lb seed
Cereal Grains (except corn and sorghum) such as Barley, Buckwheat, Millet, Pearl, Proso, Oats, Rice, Rye, Teosinte, Triticale and Wheat	Cereal Cyst Nematode, Root Lesion Nematode	0.01 to 0.04 oz per 100 lb seed
Canola	Cereal Cyst Nematode, Root Lesion Nematode	0.01 to 0.04 oz per 100 lb seeds
Cotton (only de-linted)	Columbia Nematode, Lance Nematode, Reniform Nematode, Root Knot Nematode, Sting Nematode	0.01 to 0.03 oz per 100,000 seeds

Crop	Pests	Rate
Corn (including field, sweet, and pop)	Dagger Nematode, Lance Nematode, Needle Nematode, Pin Nematode, Ring Nematode, Root Knot Nematode, Root Lesion Nematode, Spiral Nematode, Sting Nematode, Stubby Root Nematode, Stunt Nematode	0.01 to 0.04 oz per 80,000 seeds
Grass Forage, Fodder and Hay such as any grass, Gramineae family (either green or cured) (except sugarcane) and those included in the Cereal grain group, that will be fed or grazed by livestock, all pasture and range grasses and those grown for hay or silage	Lance Nematode, Needle Nematode, Pin Nematode, Ring Nematode, Root Knot Nematode, Root Lesion Nematode, Spiral Nematode, Sting Nematode, Stubby Root Nematode, Stunt Nematode	0.01 to 0.04 oz per 100 lb seed
Non-Grass Animal Feed such as Alfalfa, Bean, Velvet; Clover (Trifolium and Melilotus), Kudzu, Lespedeza, Lupin, Sainfoin, Trefoil and Vetch (Crown and Milk)	Root Knot Nematode, Root Lesion Nematode	0.01 to 0.04 oz per 100 lb seed
Legume Vegetables (Succulent or Dried) (except soybeans) such as Bean (<i>Lupinus</i>) (including Grain lupin, Sweet lupin, White lupin, and White sweet lupin); Bean (<i>Phaseolus</i>) (including Field bean, Kidney bean, Lima bean, Navy bean, Pinto bean, Runner bean, Snap bean, Tepary bean and Wax bean); Bean (<i>Vigna</i>) (including Adzuki bean, Asparagus bean, Blackeyed pea, Catjang, Chinese longbean, Cowpea, Crowder pea, Moth bean, Mung bean, Rice bean, Southern pea, Urd bean and Yardlong bean); Broad bean (fava); Chickpea (garbanzo); Guar; Jackbean; Lablab bean; Lentil; Pea (<i>Pisum</i>) (including Dwarf pea, Edible-podded pea, English pea, Field pea, Garden pea, Green pea, Snowpea and Sugar snap pea); Pigeon pea and Sword bean	Pea Cyst Nematode, Root Knot Nematode, Root Lesion Nematode	0.01 to 0.04 oz per 100 lb seed
Oilseeds (except canola, cotton, rapeseed and sunflower) such as Borage, Calendula, Castor oil plant, Chinese tallowtree, Crambe, Cuphea, Echium, Euphorbia, Evening primrose, Flax seed, Gold of Pleasure, Hare's-ear mustard, Jojoba, Lesquerella, Lunaria, Meadow foam, Milkweed, Mustard seed, Niger seed, Oil radish, Poppy seed, Rose hip, Safflower, Sesame, Stokes aster, Sweet rocket, Tallowwood, Tea oil plant and Vernonia	Cereal Cyst Nematode, Root Lesion Nematode,	0.04 to 0.09 oz per 100 lb seed
Potato Seed Piece	Potato Cyst Nematode, Root Knot Nematode, Root Lesion Nematode, Sting Nematode, Stubby Root Nematode	0.01 to 0.04 oz per 100 lb seed pieces

Crop	Pests	Rate
Root and Tuber (except potato and sugarbeets) such as Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Beet (Garden), Burdock (edible), Canna (edible), Carrot, Cassava (Bitter and Sweet), Celeriac, Chayote (Root), Chervil (Turnip-rooted), Chicory, Chufa, Dasheen (taro), Horseradish, Leren, Parsley (turnip-rooted), Parsnip, Radish, Radish (oriental), Rutabaga, Salsify (including black and Spanish), Skirret, Sweet potato, Tanier, Turmeric, Turnip and Yam (including bean and true)	False Root Knot Nematode, Root Knot Nematode, Sting Nematode, Stubby Root Nematode	0.01 to 0.03 oz per 100 lb seed
Sorghum	Ring Nematode, Root Knot Nematode, Root Lesion Nematode, Sting Nematode, Stubby Root Nematode	0.01 to 0.04 oz per 100 lb seed
Soybean	Reniform Nematode, Root Knot Nematode, Soybean Cyst Nematode	0.02 to 0.12 oz per 140,000 seeds
Sugarbeets	Bulb Nematode, Clover Cyst Nematode, False Root Knot Nematode, Root Knot Nematode, Stem Nematode, Sugarbeet Nematode,	0.01 to 0.03 oz per 100,000 seeds
Sunflower	Cereal Cyst Nematode, Root Lesion Nematode	0.04 to 0.09 oz per 100 lb seed

{Note: The Instructions for Nematode Control Applications statements' grid format will be used if market label space permits; otherwise a paragraph format will be used.}

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Store in cool, dry conditions. Do not freeze. Tightly close opened packages. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **Container Handling:** Non-refillable container; do not reuse or refill this container. Empty bag completely into formulation equipment. Take bag to recycling facility, if available, or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

{Batch Code/Lot Number will appear either on the label or the container per PR Notice 2007-4.}

WARRANTY STATEMENT

WARRANTY: The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. LidoChem, Inc. warrants that at the time of the first sale of this product it conforms to the chemical description on the label and when used according to the label directions under normal growing conditions is reasonably fit for the purposes referred to above. Buyers/Users of this product assume full risk for any use contrary to the specified directions. If this product does not perform as warranted above and to the extent consistent with applicable law, customers sole remedy for breach of warranty shall be replacement of the product or refund of the purchase price paid, at the option of LidoChem, Inc. EXCEPT AS

PROVIDED ELSEWHERE IN WRITING CONTAINING AN EXPRESS REFERENCE TO THIS WARRANTY AND LIMITATION OF DAMAGES, SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTY TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO.

Varnimo is a registered trademark of LidoChem, Inc.

[] Denotes optional/alternate language

{ } Denotes language that will not appear on market labeling.